

## ABSTRACT OF THE DISCLOSURE

A III-V group nitride system semiconductor substrate has  
III-V group nitride system single crystal grown on a  
5 hetero-substrate. The III-V group nitride system  
semiconductor substrate has a flat surface and satisfies the  
relationship of  $\theta > \alpha$ , where  $\theta$  [deg] is given as an average in  
angles of the substrate surface to low index surfaces closest  
to the substrate surface measured at a plurality of arbitrary  
10 points in plane of the substrate, and a variation range of the  
measured angles to  $\theta$  is represented by  $\pm \alpha$  [deg].